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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/544,268	07/24/2006	John Gordon	P07285US00	1331

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801 GRAND AVENUE
SUITE 3200
DES MOINES, IA 50309-2721

EXAMINER	
MUROMOTO JR, ROBERT H	
ART UNIT	**PAPER NUMBER**
3765	
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03/24/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/544,268	GORDON ET AL.	
	Examiner	Art Unit	
	BOBBY H. MUROMOTO JR	3765	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *05 March 2009*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *25-33 and 37-48* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *25-33 and 37-48* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

Claim Rejections - 35 USC § 102

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 25-36, 38, and 40-46 are rejected under 35 U.S.C. 102(b) as being anticipated by US patent 4,274,158.

'158 discloses an insulating material for use in diver's suits (wet or dry).

'158 discloses a material with many lamina that are then laminated to each other as claimed.

'158 discloses, "***The layer 26 closest to the wearer's skin is disclosed as being made from knitted nylon (synthetic), cotton, wool or blends or sublayers thereof, (as claimed).***"

'This layer 26 serves primarily ***to absorb perspiration from the diver's body in the case of a so-called "dry suit" where wrists, ankles and neck openings seal with the skin of the diver*** or in the case of a two-piece "dry suit". It also permits easy donning and doffing of the garment. In the case of a "wet suit" ***this layer 26 would function to minimize the extent of convective heat loss to water moving around between the diver's skin and his diving suit*** (col. 5, lines 44-54).'

Suit in figures covers areas in claims 28 and 41.

The layer 26 covers the entire suit inherently providing the limitations in claims 30-33 and 41.

Layer 20 is "neoprene rubber (commonly used in the past in diver's suits in the form of a closed-cell foam)" and is the first outer layer as claimed.

Additional layers are provided outside of the outer layer as claimed.

The layer 26 is clearly separate from outer layer 20 that is then attached together (laminated together). The 'worn as...' limitation does not limit the suit. And the suit is worn as 'a separate layer with the outer layer placed thereover with attachment means provided.' This limitation is also a product-by-process limitation. Once the examiner shows that the reference product is similar to the claimed product the burden shifts to the applicant to show a material difference between the prior art and claimed invention.

As shown in figures once layer 26 attached or laminated to the other layers it does form an 'integral' material as claimed.

'158 discloses that the layer 26 is a knitted two way stretch fabric made from nylon (inherently elastic to some extent) or blends including among other materials wool and nylon. The knitted structure and the use of nylon in the blend would at least partially impart some measure of "elasticity" to the wool blend.

With respect to claim 43, the suit is disclosed as being functional as a wetsuit and inherently provides means for the suit to permit flow of water as claimed. Additionally, the elastic nature of the reference material would inherently provide wrist and ankle seams that would function as recited control means. The specification recites these control means as smooth skin seals at the ankles and wrists.

Newly added 'substantially closed cell compressible' material is clearly disclosed by citation above reciting neoprene rubber as commonly used closed cell foam.

Newly added basis weight limitations and functional limitations regarding the 'retention' of liquid to 'form a substantially non-compressible, thermal barrier' are also considered to be disclosed by the instant reference.

With regards to recited weight properties and functional limitations the MPEP is clear:

Changes in Size/Proportion

In re Rose, 220 F.2d 459, 105 USPQ 237 (CCPA 1955) (Claims directed to a lumber package "of appreciable size and weight requiring handling by a lift truck" where held unpatentable over prior art lumber packages which could be lifted by hand because limitations relating to the size of the package were not sufficient to patentably distinguish over the prior art.); *In re Rinehart*, 531 F.2d 1048, 189 USPQ 143 (CCPA 1976) ("mere scaling up of a prior art process capable of being scaled up, if such were the case, would not establish patentability in a claim to an old process so scaled." 531 F.2d at 1053, 189 USPQ at 148.).

In *Gardner v. TEC Systems, Inc.*, 725 F.2d 1338, 220 USPQ 777 (Fed. Cir. 1984), *cert. denied*, 469 U.S. 830, 225 USPQ 232 (1984), the Federal Circuit held that, where the only difference between the prior art and the claims was a recitation of relative ***dimensions of the claimed device and a device having the claimed relative dimensions would not perform differently than the prior art device, the claimed device was not patentably distinct from the prior art device.***

"PRODUCT AND APPARATUS CLAIMS - WHEN THE STRUCTURE RECITED IN THE REFERENCE IS SUBSTANTIALLY IDENTICAL TO THAT OF THE CLAIMS, ***CLAIMED PROPERTIES OR FUNCTIONS ARE PRESUMED TO BE INHERENT***

Where the claimed and prior art products are identical or substantially identical in structure or composition, or are produced by identical or substantially identical processes, ***a prima facie case of either anticipation or obviousness*** has been established. *In re Best,* 562 F.2d 1252, 1255, 195 USPQ 430, 433 (CCPA 1977). "When

the PTO shows a sound basis for believing that the products of the applicant and the prior art are the same, ***the applicant has the burden of showing that they are not*** (MPEP 2112.01)."

In view of the fact that all structural limitations of the claims are disclosed, the burden is shifted to the applicant to show non-obvious material differences between the reference and the prior art and to prove that the reference material does not provide the recited basis weight and functional limitations with regard to liquid retention and barrier layer formation. Recently submitted remarks and affidavit have been considered but are not persuasive. Wool is inherently and widely, well known to have hydrophilic nature and inherently provides thermal insulation. Use of Wool to provide a thermal insulation barrier is not an unexpected result as wool is known to hold water and inherently would provide added thermal insulation as this is the known and recited insulation technique used in wetsuits.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 37, 39, and 48 are rejected under 35 U.S.C. 103(a) as being unpatentable over '158.

Although essentially all of the limitations of the claimed invention are disclosed above, '158 does not teach the use of merino wool or the specific percentage for blending of the synthetic and wool material.

With respect to the percentage blend, absent any criticality or showing of unexpected results arising from the specific blend range, one of ordinary skill in the art could through routine engineering design choice determine the exact blend percentage for a desired end use application of the dive suit material.

As for the use of merino wool, it is a well-known and widely used practice to use merino wool instead of standard wool. Merino wool is recognized as a higher grade of wool, having increased softness and comfort against the skin (see Non Patent Literature cited on PTO-892) and has been in use for hundreds of years in all type of garments that require warmth and comfort.

Therefore it would have been an obvious variant to modify the '158 wool or wool blended layer to use merino wool as merino wool is recognized as a higher grade of wool, having increased softness and comfort against the skin (see Non Patent Literature cited on PTO-892) and has been in use for hundreds of years in all type of garments that require warmth and comfort.

Response to Arguments

Applicant's arguments filed 3/5/2009 have been fully considered but they are not persuasive.

Applicant's arguments with regard to the rejections are incorrect.

Discussion about additional layers in the reference beyond those claimed are not relevant as the current claim limitations do not exclude additional layers as the claims are in 'comprising' or open format. All recited claim limitations are clearly disclosed by the prior art as shown here and in the previous rejections as cited above.

Discussion regarding the 'insulation quality of nylon, cotton or wool' is incorrect. These materials all inherently have intrinsic properties that can not be disregarded. Since the reference discloses these materials their intrinsic inherent properties are also part of the disclosure of the prior art reference.

Applicant has incorrectly cited the reference. The reference clearly discloses the use of nylon, wool, cotton or blends thereof and these materials are clearly inherently part of the insulation structure. Any material added to the suit will add some insulative property as a result of the laws of thermodynamics.

The reference also clearly discloses, "This feature is one of rendering the core 12 gas permeable and evacuable while still retaining effectiveness **as an insulating barrier**. ***This effectiveness as an insulating barrier has been demonstrated with as few lamina as five (5). Furthermore, the basic flexibility needed for use in a diver's garment or apparatus has been maintained with as many lamina as forty (40)***. Thus a range in the number of lamina 14 from 5 to 40 has been found to be useful."

So the applicant's statement that the reference does not consider insulation in the formation of the layers of the garment is wholly incorrect. Also fabric layers inherently provide insulative effects. It is not unexpected that insulation properties

would be affected by changing in the number or materials of the layers of a wetsuit/drysuit.

Additionally, with respect to the exact percentage of wool used and the type of wool used:

"The selection of a known material based on its suitability for its intended use supported a prima facie obviousness determination in Sinclair & Carroll Co. v. Interchemical Corp., 325 U.S. 327, 65 USPQ 297 (1945) (Claims to a printing ink comprising a solvent having the vapor pressure characteristics of butyl carbitol so that the ink would not dry at room temperature but would dry quickly upon heating were held invalid over a reference teaching a printing ink made with a different solvent that was nonvolatile at room temperature but highly volatile when heated in view of an article which taught the desired boiling point and vapor pressure characteristics of a solvent for printing inks and a catalog teaching the boiling point and vapor pressure characteristics of butyl carbitol. "Reading a list and selecting a known compound to meet known requirements is no more ingenious than selecting the last piece to put in the last opening in a jig-saw puzzle." 325 U.S. at 335, 65 USPQ at 301.).

Changes in Size/Proportion

In re Rose, 220 F.2d 459, 105 USPQ 237 (CCPA 1955) (Claims directed to a lumber package "of appreciable size and weight requiring handling by a lift truck" where held unpatentable over prior art lumber packages which could be lifted by hand because limitations relating to the size of the package were not sufficient to patentably distinguish over the prior art.); *In re Rinehart*, 531 F.2d 1048, 189 USPQ 143 (CCPA 1976) ("mere scaling up of a prior art process capable of being scaled up, if such were the case, would not establish patentability in a claim to an old process so scaled." 531 F.2d at 1053, 189 USPQ at 148.).

In *Gardner v. TEC Systems, Inc.*, 725 F.2d 1338, 220 USPQ 777 (Fed. Cir. 1984), *cert. denied*, 469 U.S. 830, 225 USPQ 232 (1984), the Federal Circuit held that, where the only difference between the prior art and the claims was a recitation of relative dimensions of the claimed device and a device having the claimed relative dimensions would not perform differently than the prior art device, the claimed device was not patentably distinct from the prior art device.

Therefore the mere selection of Merino wool, a well-known "premium wool" in any percentage used to take advantage of wools intrinsic, well-known, hydrophilic and insulative properties can not be considered as patentably distinct limitations therefore supporting the prima facie obviousness previously and instantly presented by the Examiner.

Since these are the arguments and no substantive amendments are provided the rejections remain and are considered to be proper.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to BOBBY H. MUROMOTO JR whose telephone number is (571)272-4991. The examiner can normally be reached on 8-530, M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gary Welch can be reached on 571-272-4996. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Robert H Muromoto, Jr./
Primary Examiner, Art Unit 3765